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10/566,794	07/02/2007	Johan Einar Hustad	BRYN/0013	8990
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EXAMINER BERNSTEIN, DANIEL A				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/566,794

**Applicant(s)**

HUSTAD, JOHAN EINAR

**Examiner**

DANIEL A. BERNSTEIN

**Art Unit**

4166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/ISD)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 01/31/06

## **DETAILED ACTION**

### ***Drawings***

1. Figure 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The disclosure is objected to because of the following informalities:

Reference to Claims on page 1 of the specification is improper as the claims are subject to change.

Appropriate section headings are required.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 3 rejected under 35 U.S.C. 102(b) as being anticipated by NO Patent No. 63947 to Cappelen et al. (Cappelen) (reference is also made to English translation). Cappelen teaches:

In Reference to Claim 1

An afterburner device for stoves for burning wood or other types of biomass, coke or coal, supplying fresh, heated air to a zone in the stove above the stove's combustion chamber, characterized in that the device is constituted by a plate (15 see Fig. 3), that is folded and provided with holes (18, 19 see Figs. 2 & 3), wherein the plate is installed on the inside of a side or rear wall (7 see Fig. 1) of an existing traditional stove (see Fig. 1) constructed without aperture(s) for secondary air (see Fig. 1, the plate is capable of being installed in such a stove), and for cooperation with at least one secondary air aperture (17) to arranged in said wall upon installation of the plate (15) in the already existing stove (see Fig. 1, the device is capable of being installed in an existing stove).

In Reference to Claim 3

The afterburner device according to claim 1 (see rejection of claim 1), characterized in that the plate is provided with holes (18 see Fig. 2) near a folded end of the plate where the holes are arranged towards the bottom edge when installed (see Fig. 1), to establish and maintain a pilot flame (the holes 18 are in the same location and therefore would maintain a pilot flame).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Cappelen in view of US Pat No. 4,964,397 to Purcell et al. (Purcell).

In Reference to Claim 4

Cappelen teaches the afterburner device of claim 1 (see rejection of claim 1 above), but Cappelen fails to teach that the device is characterized in that the plate consists of two parts which can be mutually displaced to provide an adjustable dimension in a lateral direction when installed, for adaptation to stoves of different sizes.

Purcell teaches a plate that consists of two parts which can be mutually displaced to provide an adjustable dimension in a lateral direction when installed, for adaptation to stoves of different sizes (Column 5 lines 56-68 and Column 6 lines 1-10). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have designed the plate of Cappelen with two parts which can be mutually displaced in a lateral direction when installed in order to make the device adjustable as taught by Purcell.

7. Claims 1, 2 and 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Purcell.

In Reference to Claim 1

Purcell teaches an afterburner device for stoves for burning wood or other types of biomass, coke or coal, supplying fresh, heated air to a zone in the stove above the stove's combustion chamber, characterized in that the device is constituted by a plate (72 see Fig. 5), that provided with holes (76 see Fig. 4), wherein the plate is installed on the inside of a side(24,26), or rear (48) wall 48 (see Fig. 2) of an existing traditional stove (see Fig. 2) constructed without aperture(s) for secondary air (see Fig. 2, secondary air apertures are provided by the construction or modification of the stove and not the device), and for cooperation with at least one secondary air aperture (see Fig. 2) to arranged in said wall upon installation of the plate (see Fig.2) in the already existing stove (see Fig. 2).

Purcell is silent about a plate that is folded as described in the applicant's disclosure. The plate of Purcell could be constructed of one piece folded at the ends, but whether the plate of Purcell is folded or constructed of multiple connected sections does not affect the functionality of the device and therefore the folded feature as claimed cannot be considered patentable. It would therefore have been obvious to a person having ordinary skill in the art at the time the invention was made to have designed the device as shown in Purcell Fig. 5 of one folded piece or in multiple pieces.

In Reference to Claim 2

Purcell teaches the afterburner device according to claim 1 (see rejection of claim 1 above), characterized in that the plate has a number of holes (80 see Fig. 4), or slits near a folded end (see discussion of folded above) of the plate the holes or slits

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being arranged at the uppermost edge (75) when installed, to allow air to get to the said zone, as at least one secondary air aperture is arranged in a position just above a lower folded end of the plate (76 see Fig. 5) when it is installed whereby air can be pre-heated while rising up behind the plate (74 see Fig. 2&5).

In Reference to Claim 4

Purcell teaches the afterburner device of claim 1 (see rejection of claim 1 above), characterized in that the plate consists of two parts (see Fig. 8) which can be mutually displaced to provide an adjustable dimension in a lateral direction (90 and 94) when installed, for adaptation to stoves of different sizes (Column 5 lines 56-68 and Column 6 lines 1-10).

8. Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Purcell as applied to claim 1 above and further in view of Cappelen.

In Reference to Claim 3

Purcell teaches the afterburner device according to claim 1 (see rejection of claim 1 above).

Purcell does not teach the plate is provided with holes near a folded end of the plate (Fig. 5, see discussion of folded above) where the holes are arranged towards the bottom edge when installed, to establish and maintain a pilot flame

Cappelen teaches a plate (15) is provided with holes (18) near a folded end of a plate (Fig. 5, see discussion of folded above) where the holes (18) are arranged

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towards the bottom edge when installed (see Fig. 3) in order to sustain combustion over the furnace chamber's entire length (see Cappelen translation page 4, third paragraph).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the holes (18) of Cappelen arranged towards the bottom edge of the plate of Purcell in order to sustain combustion over the furnace chamber's entire length as explicitly taught by Cappelen. Since the holes would be position in the same location as applicant's, they would inherently establish and maintain a pilot flame.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL A. BERNSTEIN whose telephone number is (571)270-5803. The examiner can normally be reached on Monday-Friday 8:00 AM - 5:00 PM EDT.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Bomberg can be reached on 571-272-4922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DAB

/Kenneth Bomberg/  
Supervisory Patent Examiner, Art Unit 4124